

217/785-1705

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT

PERMITTEE

RockTenn CP, LLC  
Attn: Environmental Coordinator  
2251 Berens Drive  
New Lenox, Illinois 60451

<u>Application No.:</u> 09030061	<u>I.D. No.:</u> 197070AAW
<u>Applicant's Designation:</u>	<u>Date Received:</u> March 26, 2009
<u>Subject:</u> Corrugated Container Manufacturing Facility	
<u>Date Issued:</u> June 6, 2014	<u>Expiration Date:</u> June 6, 2024
<u>Location:</u> 2251 Berens Drive, New Lenox, Will County	

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of seven (7) flexographic printers, four (4) folder/glueers, one (1) starch silo with baghouse and starch adhesive/corrugating process, pneumatic scrap paper collection system controlled by a dust collector and one (1) boilers (natural gas/LPG, 20.41 mmBtu/hour) pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This federally enforceable state operating permit is issued:
  - i. To limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/year for Volatile Organic Material (VOM), 10 tons/year for any single Hazardous Air Pollutant (HAP) and 25 tons/year of any combination of such HAPs). As a result, the source is excluded from the requirements to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit are described in Attachment A.
  - ii. To establish federally enforceable production and operating limitations, which restrict the potential to emit to less than 10 tons/year for any individual Hazardous Air Pollutant (HAP) and 25 tons/year of any combination of such HAPs so that the source is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Printing and Publishing Industry, 40 CFR 63 Subpart KK, and the NESHAP for Paper and Other Web Coating, 40 CFR 63 Subpart JJJJ.
- b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes all operating permit(s) for this location.

2. The boiler is subject to the New Source Performance Standard (NSPS) for Small Industrial - Commercial - Institutional Steam Generating Units, 40 CFR 60, Subparts A and Dc. The Illinois EPA is administering the NSPS in Illinois on behalf of the United States EPA under a delegation agreement. Pursuant to 40 CFR 60.40c(a), except as provided in 40 CFR 60.40c(d), (e), (f), and (g), the affected facility to which 40 CFR 60 Subpart Dc applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (mmBtu/hr)) or less, but greater than or equal to 2.9 MW (10 mmBtu/hr).
- 3a. Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.
- b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.
- c. Pursuant to 35 Ill. Adm. Code 212.301, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source.
- d. Pursuant to 35 Ill. Adm. Code 212.321(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).
4. Pursuant to 35 Ill. Adm. Code 216.121, no person shall cause or allow the emission of carbon monoxide (CO) into the atmosphere from any fuel combustion emission source with actual heat input greater than 2.9 MW (10 mmBtu/hour) to exceed 200 ppm, corrected to 50 percent excess air.
- 5a. Pursuant to 35 Ill. Adm. Code 218.187(a)(1), on and after January 1, 2012 except as provided in 35 Ill. Adm. Code 218.187(a)(2), the requirements of 35 Ill. Adm. Code 218.187 shall apply to all cleaning operations which use organic materials at sources that emit a total of 226.8 kg per calendar month (500 lbs per calendar month) or more of

VOM, in the absence of air pollution control equipment from cleaning operations at the source other than cleaning operations identified in 35 Ill. Adm. Code 218.187(a)(2). For purposes of 35 Ill. Adm. Code 218.187, "cleaning operation" means the process of cleaning products, product components, tools, equipment, or general work areas during production, repair, maintenance, or servicing, including but not limited to spray gun cleaning, spray booth cleaning, large and small manufactured components cleaning, parts cleaning, equipment cleaning, line cleaning, floor cleaning, and tank cleaning, at sources with emission units;

- b. Pursuant to 35 Ill. Adm. Code 218.187(b), no owner or operator of a source subject to 35 Ill. Adm. Code 218.187, other than manufacturers of coatings, inks, adhesives, or resins, shall perform any cleaning operation subject to 35 Ill. Adm. Code 218.187 unless the owner or operator meets the requirements in 35 Ill. Adm. Code 218.187(b)(1), (b)(2), or (b)(3). No owner or operator of a source that manufactures coatings, inks, adhesives, or resins shall perform any cleaning operation subject to 35 Ill. Adm. Code 218.187 unless the owner or operator meets the requirements in at least one of the following subsections: 35 Ill. Adm. Code 218.187(b)(1), (b)(2), (b)(3), (b)(4), or (b)(5):

- i. The VOM content of the as-used cleaning solutions does not exceed the following emissions limitations:

A. Cleaning of ink application equipment:

	<u>kg/l</u>	<u>lb/gal</u>
Flexographic printing that does not print flexible packaging	0.10	0.83

	<u>kg/l</u>	<u>lb/gal</u>
B. All other cleaning operations not subject to a specific limitation in 35 Ill. Adm. Code 218.187(b)(1)(A) through (b)(1)(C)	0.050	0.42

Or

- ii. The composite vapor pressure of each as-used cleaning solution used does not exceed 8.0 mmHg measured at 20°C (68°F).

- c. Pursuant to 35 Ill. Adm. Code 218.301, no person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 Ill. Adm. Code 218.302, 218.303, or 218.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code 218 Subpart G (Use of Organic Material) shall apply only to photochemically reactive material.
- d. Pursuant to 35 Ill. Adm. Code 218.401(a)(2)(A), no owner or operator of a subject flexographic or rotogravure printing line shall apply at any time any coating or ink unless the VOM content does not exceed the limitation specified in either 35 Ill. Adm. Code 218.401(a)(1) or

(a)(2), as applicable. Compliance with 35 Ill. Adm. Code 218.401 must be demonstrated through the applicable coating or ink analysis test methods and procedures specified in 35 Ill. Adm. Code 218.105(a) and the recordkeeping and reporting requirements specified in 35 Ill. Adm. Code 218.404(c). As an alternative to compliance with 35 Ill. Adm. Code 218.401(a), a subject printing line may meet the requirements of 35 Ill. Adm. Code 218.401(b) or (c). On and after August 1, 2010 for owners/operators of flexographic or rotogravure printing lines that do not print flexible packaging, either:

- i. Forty percent VOM by volume of the coating and ink (minus water and any compounds which are specifically exempted from the definition of VOM); or
  - ii. Twenty-five percent VOM by volume of the volatile content in the coating and ink;
- e. Pursuant to 35 Ill. Adm. Code 218.402(d), once subject to the limitations of 35 Ill. Adm. Code 218.401, a flexographic or rotogravure printing line is always subject to the limitations of 35 Ill. Adm. Code 218.401.
  - f. Pursuant to 35 Ill. Adm. Code 218.900(a), except as provided in 35 Ill. Adm. Code 218.900(b), on and after May 1, 2012, the requirements of 35 Ill. Adm. Code 218 Subpart JJ shall apply to miscellaneous industrial adhesive application operations at sources where the total actual VOM emissions from all such operations, including related cleaning activities, equal or exceed 6.8 kg/day (15 lbs/day), calculated in accordance with 35 Ill. Adm. Code 218.904(a)(1)(B), in the absence of air pollution control equipment.
  - g. Pursuant to 35 Ill. Adm. Code 218.901(b)(1)(D), the owner or operator of adhesive application operations listed in 35 Ill. Adm. Code 218.901(b) shall comply with the following VOM emission limitations, minus water and any compounds that are specifically exempted from the definition of VOM, as applied. If an adhesive is used to bond dissimilar substrates together, the substrate category with the highest VOM emission limitation shall apply:

	kg VOM/l adhesive or adhesive primer applied	lb VOM/gal adhesive or adhesive primer applied
General adhesive application operations		
i. Porous material (except wood)	0.120	(1.0)
ii. Other substrates	0.250	(2.1)

- 6a. This permit is issued based upon the source not being subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for National Emission Standards for the Printing and Publishing Industry, 40 CFR 63 Subpart KK. This is a result of the federally enforceable production and operating limitations, which

restrict the potential to emit to less than 10 tons/year for any individual Hazardous Air Pollutant (HAP), and 25 tons/year of any combination of such HAPs.

- b. This permit is issued based on the source not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Paper and Other Web Coating, 40 CFR 63 Subpart JJJJ. This is a result of the federally enforceable production and operating limitations, which restrict the potential to emit to less than 10 tons/year for any individual Hazardous Air Pollutant (HAP), and 25 tons/year of any combination of such HAPs.
- c. This permit is issued based on the boilers at this source not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63 Subpart DDDDD because this source is not or is not part of, a major source of HAP as defined in 40 CFR 63.2.
- d. This permit is issued based on the boilers at this source not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers Area Sources, 40 CFR 63 Subpart JJJJJJ. Pursuant to 40 CFR 63.11195(e), a gas-fired boiler as defined in 40 CFR 63 Subpart JJJJJJ are not subject to 40 CFR 63 Subpart JJJJJJ and to any requirements in 40 CFR 63 Subpart JJJJJJ. Pursuant to 40 CFR 63.11237, gas-fired boiler includes any boiler that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year.
- 7. Pursuant to 35 Ill. Adm. Code 212.314, 35 Ill. Adm. Code 212.301 shall not apply and spraying pursuant to 35 Ill. Adm. Code 212.304 through 212.310 and 35 Ill. Adm. Code 212.312 shall not be required when the wind speed is greater than 40.2 km/hour (25 mph). Determination of wind speed for the purposes of this rule shall be by a one-hour average or hourly recorded value at the nearest official station of the U.S. Weather Bureau or by wind speed instruments operated on the site. In cases where the duration of operations subject to this rule is less than one hour, wind speed may be averaged over the duration of the operations on the basis of on-site wind speed instrument measurements.
- 8a. Pursuant to 35 Ill. Adm. Code 218.187(a)(2)(B)(i), notwithstanding 35 Ill. Adm. Code 218.187(a)(1):
  - i. The following cleaning operations shall be exempt from the requirements of 35 Ill. Adm. Code 218.187(b), (c), (d), (e), (f), and (g):
    - A. Janitorial cleaning;
    - B. Stripping of cured coatings, inks, or adhesives, including screen reclamation activities;

- C. Cleaning operations in printing pre-press areas, including the cleaning of film processors, color scanners, plate processors, film cleaning, and plate cleaning;
  - ii. Cleaning operations for emission units within the following source categories shall be exempt from the requirements of 35 Ill. Adm. Code 218.187(b), (c), (d), (e), (f), and (g);
    - A. Flexible package printing;
    - B. Paper, film, and foil coating;
- b. This permit is issued based on the flexographic printers and folder gluers not being subject to 35 Ill. Adm. Code 218.204(c) (Paper Coating). Pursuant to 35 Ill. Adm. Code 218.204(c)(3), the paper coating limitation set forth in 35 Ill. Adm. Code 218.204(c) shall not apply to any owner or operator of any paper coating line on which flexographic, rotogravure, lithographic, or letterpress printing is performed if the paper coating line complies with the applicable emissions limitations in 35 Ill. Adm. Code 218 Subpart H. In addition, screen printing on paper is not regulated as paper coating, but is regulated under 35 Ill. Adm. Code 218 Subpart TT. On and after May 1, 2011, the paper coating limitation shall also not apply to coating performed on or in-line with any digital printing press, or to size presses and on-machine coaters on papermaking machines applying sizing or water-based clays.
- c. Pursuant to 35 Ill. Adm. Code 218.402(b), upon achieving compliance with 35 Ill. Adm. Code 218 Subpart H, the flexographic and rotogravure printing lines are not required to meet 35 Ill. Adm. Code 218 Subpart G (35 Ill. Adm. Code 218.301 or 218.302). Flexographic and rotogravure printing lines exempt from 35 Ill. Adm. Code 218 Subpart H are subject to 35 Ill. Adm. Code 218 Subpart G (35 Ill. Adm. Code 218.301 or 218.302). Rotogravure or flexographic equipment used for both roll printing and paper coating is subject to 35 Ill. Adm. Code 218 Subpart H.
- d. Pursuant to 35 Ill. Adm. Code 218.900(b)(2), the requirements of 35 Ill. Adm. Code 218.901(b) through (e) shall not apply to the following:
  - i. Aerosol adhesive and aerosol adhesive primer application operations;
  - ii. Operations using adhesives and adhesive primers that are supplied to the manufacturer in containers with a net volume of 0.47 liters (16 oz) or less, or a net weight of 0.45 kg (1 lb) or less.
- 9. Pursuant to 40 CFR 60.11(d), at all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and

maintenance procedures are being used will be based on information available to the Illinois EPA or USEPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

- 10a. Pursuant to 35 Ill. Adm. Code 218.187(c), the owner or operator of a subject source shall demonstrate compliance with 35 Ill. Adm. Code 218.187 by using the applicable test methods and procedures specified in 35 Ill. Adm. Code 218.187(g) and by complying with the recordkeeping and reporting requirements specified in 35 Ill. Adm. Code 218.187(e).
- b. Pursuant to 35 Ill. Adm. Code 218.187(d), the owner or operator of a source subject to the requirements of 35 Ill. Adm. Code 218.187 shall comply with the following for each subject cleaning operation. Such requirements are in addition to work practices set forth in 35 Ill. Adm. Code 218.187(b)(4) and (b)(5), as applicable:
  - i. Cover open containers and properly cover and store applicators used to apply cleaning solvents;
  - ii. Minimize air circulation around the cleaning operation;
  - iii. Dispose of all used cleaning solutions, cleaning towels, and applicators used to apply cleaning solvents in closed containers;
  - iv. Utilize equipment practices that minimize emissions.
- c. Pursuant to 35 Ill. Adm. Code 218.901(e), the owner or operator of a source subject to 35 Ill. Adm. Code 218 Subpart JJ shall apply all miscellaneous industrial adhesives using one or more of the following methods:
  - i. Electrostatic spray;
  - ii. High volume low pressure (HVLP) spray;
  - iii. Flow coating. For the purposes of 35 Ill. Adm. Code 218 Subpart JJ, flow coating means a non-atomized technique of applying coating to a substrate with a fluid nozzle with no air supplied to the nozzle;
  - iv. Roll coating or hand application, including non-spray application methods similar to hand or mechanically powered caulking gun, brush, or direct hand application;
  - v. Dip coating, including electrodeposition. For purposes of 35 Ill. Adm. Code 218 Subpart JJ, "electrodeposition" means a water-borne dip coating process in which opposite electrical charges are applied to the substrate and the coating. The coating is attracted to the substrate due to the electrochemical potential difference that is created;
  - vi. Airless spray;

- vii. Air-assisted airless spray; or
  - viii. Another adhesive application method capable of achieving a transfer efficiency equal to or better than that achieved by HVLP spraying, if the method is approved in writing by the Illinois EPA.
- d. Pursuant to 35 Ill. Adm. Code 218.901(f), the owner or operator of a source subject to 35 Ill. Adm. Code Part 218 Subpart JJ shall comply with the following work practices for each subject miscellaneous adhesive application operation at the source:
- i. Store all VOM-containing adhesives, adhesive primers, process-related waste materials, cleaning materials, and used shop towels in closed containers;
  - ii. Ensure that mixing and storage containers used for VOM-containing adhesives, adhesive primers, process-related waste materials, and cleaning materials are kept closed at all times except when depositing or removing those materials;
  - iii. Minimize spills of VOM-containing adhesives, adhesive primers, process-related waste materials, and cleaning materials;
  - iv. Convey VOM-containing adhesives, adhesive primers, process-related waste materials, and cleaning materials from one location to another in closed containers or pipes; and
  - v. Minimize VOM emissions from the cleaning of application, storage, mixing, and conveying equipment by ensuring that equipment cleaning is performed without atomizing the cleaning solvent and all spent solvent is captured in closed containers.
- 11a. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the odor nuisance.
- b. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the dust collectors associated with the starch silo and the pneumatic scrap paper collection system such that the dust collectors are kept in proper working condition and not cause a violation of the Illinois Environmental Protection Act or regulations promulgated therein.
- c. This permit is issued based on the use of only natural gas and liquefied petroleum gas (LPG) in the boiler. The use of any other fuel in the boiler requires that the Permittee first obtain a construction permit from the Illinois EPA.
- 12a. This permit is issued based on this source not being a participating source in the Emissions Reduction Market System (ERMS), 35 Ill. Adm. Code Part 205, pursuant to 35 Ill. Adm. Code 205.200. This is based on the source's actual VOM emissions during the seasonal allotment period



from May 1 through September 30 of each year being less than 10 tons and the source's baseline emissions also being less than 10 tons.

- b. In the event that the source's VOM emissions during the seasonal allotment period equal or exceed 10 tons, the source shall become a participating source in the ERMS and shall comply with 35 Ill. Adm. Code Part 205, by holding allotment trading units (ATUs) for its VOM emissions during each seasonal allotment period, unless the source obtains exemption from the ERMS by operating with seasonal VOM emissions of no more than 15 tons pursuant to a limitation applied for and established in a Clean Air Act Permit Program (CAAPP) permit or a Federally Enforceable State Operating Permit (FESOP).
  - c. Pursuant to 35 Ill. Adm. Code 205.316(a), any participating or new participating source shall not operate without a CAAPP permit or FESOP. Pursuant to 35 Ill. Adm. Code 205.316(a)(2), if a participating or new participating source does not have a CAAPP permit containing ERMS provisions and the source elects to obtain a permit other than a CAAPP permit, the source shall apply for and obtain a FESOP that contains, in addition to other necessary provisions, federally enforceable ERMS provisions, including baseline emissions, allotment for each seasonal allotment period, identification of any units deemed to be insignificant activities for purposes of the ERMS, emissions calculation methodologies, and provisions addressing all other applicable requirements of 35 Ill. Adm. Code Part 205.
- 13a. Emissions and operation of the printing and gluing operations, including clean-up, shall not exceed the following limits:

VOM Usage		VOM Emissions	
(Tons/Month)	(Tons/Year)	(Tons/Month)	(Tons/Year)
7.8	78.0	7.8	78.0

These limits are based on maximum material usage and VOM content.

- b. VOM and HAP emissions shall be determined as follows:

$$E = \Sigma(I_i \times D_i \times C_i) + \Sigma(S_j \times D_j \times C_j)$$

Where:

E = VOM or HAP emissions (lb/month);

I<sub>i</sub> = Ink and adhesive usage of each type on the presses (gallons/month);

D<sub>i</sub> = Density of each ink and adhesive used (lb/gallon);

C<sub>i</sub> = VOM or HAP content in the ink of each type, as applied on the controlled presses (% by weight);

S<sub>j</sub> = Clean-up solvent usage of each type (gallons/month);

D<sub>j</sub> = Density of each clean-up solvent used (lb/gallon);

$C_j$  = VOM or HAP content of the clean-up solvent of each type (% by weight);

- c. Organic HAP emissions shall be calculated using the equation in Condition 13(b) substituting VOM content with HAP content.
- d. Emissions and operation of the boilers and space heaters shall not exceed the following limits:
  - i. Natural gas usage: 24.4 mmscf/month and 292.8 mmscf/year;
  - ii. liquefied petroleum gas (LPG) usage: 0.40 million gallons/month and 3.95 million gallons/year; and
  - iii. Emissions from natural gas combustion (i.e., the 20.4mmBtu/hour Boiler and comfort heaters):

<u>Pollutant</u>	<u>Natural Gas</u> <u>(lbs/mmscf)</u>	<u>EMISSIONS</u>	
		<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
Carbon Monoxide (CO)	84	1.0	12.3
Nitrogen Oxides (NO <sub>x</sub> )	100	1.2	14.6
Particulate Matter (PM)	7.6	0.1	1.1
Sulfur Dioxide (SO <sub>2</sub> )	0.6	0.01	0.1
Volatile Organic Material (VOM)	5.5	0.06	0.8

These limits are based on the maximum natural gas usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998. Compliance with these emission limits will be determined by applying the designated emission factors to the quantity of natural gas actually burned.

- iv. Emissions from LPG combustion (i.e., the 20.4mmBtu/hour Boiler only):

<u>Pollutant</u>	<u>LPG</u> <u>(lbs/1,000 Gal)</u>	<u>EMISSIONS</u>	
		<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
Carbon Monoxide (CO)	3.2	0.64	6.3
Nitrogen Oxides (NO <sub>x</sub> )	19.0	3.8	37.5
Particulate Matter (PM)	0.4	0.1	0.8
Sulfur Dioxide (SO <sub>2</sub> )	1.2*	0.24	2.4
Volatile Organic Material (VOM)	0.5	0.1	1.0

\* Based on specified sulfur content of 12 gr/100 scf. For other sulfur contents the factor is determined as  $0.10S$  where S is the sulfur content expressed as grains/100 scf.

These limits are based on the LPG usage (20.4 MMBTU/hr boiler) and standard emission factors (Table 1.5-1, AP 42, Fifth Edition, Volume I, Supplement B , October 1996). Compliance with these emission limits will be determined by applying the designated emission factors to the quantity of LPG actually burned.

- e. Emissions and operation of the starch adhesive/corrugating process shall not exceed the following limits:

Resin Usage		VOM Emissions	
(tons/mo)	(tons/yr)	(lbs/mo)	(tons/yr)
31.7	380	317	1.9

These limits are based on maximum operation, material balance and an average resin VOM content of 0.5 weight percent.

- f. This permit is issued based on negligible emissions of particulate matter (PM) from the starch silo with baghouse control and the pneumatic scrap paper collection system controlled by a dust collector. For this purpose emissions of PM from each of these units shall not exceed nominal emissions rates of 0.1 lb/hr and 0.44 ton/year.
  - g. The emissions of Hazardous Air Pollutants (HAP) as listed in Section 112(b) of the Clean Air Act shall not exceed 0.79 tons/month and 7.9 tons/year of any single HAP and 2.0 tons/month and 19.9 tons/year of any combination of such HAPs. As a result of this condition, this permit is issued based on the emissions of any HAP from this source not triggering the requirements of Section 112(g) of the Clean Air Act and the NESHAP for the Printing and Publishing Industry, 40 CFR 63 Subpart KK.
  - h. Compliance with the annual limits of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).
- 13a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:
- i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of

air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.

- ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.
  - b. Testing required by Conditions 14 and 15 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.
14. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA.
- 15a. Pursuant to 35 Ill. Adm. Code 218.187(g)(1), testing to demonstrate compliance with the requirements of 35 Ill. Adm. Code 218.187 shall be conducted by the owner or operator within 90 days after a request by the Illinois EPA, or as otherwise specified in 35 Ill. Adm. Code 218.187. Such testing shall be conducted at the expense of the owner or operator and the owner or operator shall notify the Illinois EPA in writing 30 days in advance of conducting the testing to allow the Illinois EPA to be present during the testing;
- b. Pursuant to 35 Ill. Adm. Code 218.187(g)(2), testing to demonstrate compliance with the VOM content limitations in 35 Ill. Adm. Code 218.187(b)(1), and to determine the VOM content of cleaning solvents and cleaning solutions, shall be conducted as follows:
    - i. The applicable test methods and procedures specified in 35 Ill. Adm. Code 218.105(a) shall be used, provided, however, Method 24 shall be used to demonstrate compliance; or
    - ii. The manufacturer's specifications for VOM content for cleaning solvents may be used if such manufacturer's specifications are based on results of tests of the VOM content conducted in accordance with methods specified in 35 Ill. Adm. Code 218.105(a); provided, however, Method 24 shall be used to determine compliance. In the event of any inconsistency between a Method 24 test and the manufacturer's specifications, the Method 24 test shall govern;
  - c. Pursuant to 35 Ill. Adm. Code 218.187(g)(3), testing to determine the VOM composite partial vapor pressure of cleaning solvents, cleaning

solvent concentrates, and as-used cleaning solutions shall be conducted in accordance with the applicable methods and procedures specified in 35 Ill. Adm. Code 218.110;

- d. Pursuant to 35 Ill. Adm. Code 218.404(a), the VOM content of each coating and ink and the efficiency of each capture system and control device shall be determined by the applicable test methods and procedures specified in 35 Ill. Adm. Code 218.105 to establish the records required under 35 Ill. Adm. Code 218.404.
- e. Pursuant to 35 Ill. Adm. Code 218.902(a), testing to demonstrate compliance with the requirements of 35 Ill. Adm. Code 218 Subpart JJ shall be conducted by the owner or operator by May 1, 2012. Thereafter, testing shall be conducted within 90 days after a request by the Illinois EPA, or as otherwise provided in 35 Ill. Adm. Code 218 Subpart JJ. The testing shall be conducted at the expense of the owner or operator and the owner or operator shall notify the Illinois EPA in writing 30 days in advance of conducting the testing to allow the Illinois EPA to be present during testing.
- f. Pursuant to 35 Ill. Adm. Code 218.902(b), testing to demonstrate compliance with the VOM content limitations in 35 Ill. Adm. Code 218.901(b) shall be conducted as follows:
  - i. Method 24, shall be used for non-reactive adhesives. If it is demonstrated to the satisfaction of the Illinois EPA and the USEPA that plant adhesive formulation data are equivalent to Method 24 results, formulation data may be used. In the event of any inconsistency between a Method 24 test and a facility's formulation data, the Method 24 test will govern;
  - ii. Appendix A of 40 CFR 63, Subpart PPPP, shall be used for reactive adhesives.
  - iii. The manufacturer's specifications for VOM content for adhesives may be used if the specifications are based on results of tests of the VOM content conducted in accordance with methods specified in 35 Ill. Adm. Code 218.902(b)(1) and (b)(2), as applicable.
- 16a. Pursuant to 40 CFR 60.7(b), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.
- b. Pursuant to 40 CFR 60.7(f), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by 40 CFR Part 60 recorded in a permanent form suitable for inspection. The file

shall be retained for at least two years following the date of such measurements, maintenance, reports, and records.

- 17a.
    - i. Pursuant to 40 CFR 60.48c(g)(1), except as provided under 40 CFR 60.48c(g)(2) and (g)(3), the owner or operator of each affected facility shall record and maintain records of the amount of each fuel combusted during each operating day.
    - ii. Pursuant to 40 CFR 60.48c(g)(2), as an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in 40 CFR 60.48c(f) to demonstrate compliance with the SO<sub>2</sub> standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month.
    - iii. Pursuant to 40 CFR 60.48c(g)(3), as an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the owner or operator of an affected facility or multiple affected facilities located on a contiguous property unit where the only fuels combusted in any steam generating unit (including steam generating units not subject to 40 CFR 60 Subpart Dc) at that property are natural gas, wood, distillate oil meeting the most current requirements in 40 CFR 60.42c to use fuel certification to demonstrate compliance with the SO<sub>2</sub> standard, and/or fuels, excluding coal and residual oil, not subject to an emissions standard (excluding opacity) may elect to record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month.
  - b. Pursuant to 40 CFR 60.48c(i), all records required under 40 CFR 60.48 shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record.
18. Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to Section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA and/or Illinois EPA to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If

relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with USEPA guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.

19. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.
- 20a. Pursuant to 35 Ill. Adm. Code 218.187(e)(3), all sources complying with 35 Ill. Adm. Code 218.187 pursuant to the requirements of 35 Ill. Adm. Code 218.187(b)(1) shall collect and record the following information for each cleaning solution used:
  - i. For each cleaning solution which is prepared at the source with automatic equipment:
    - A. The name and identification of each cleaning solution;
    - B. The VOM content of each cleaning solvent in the cleaning solution;
    - C. Each change to the setting of the automatic equipment, with date, time, description of changes in the cleaning solution constituents (e.g., cleaning solvents), and a description of changes to the proportion of cleaning solvent and water (or other non-VOM);
    - D. The proportion of each cleaning solvent and water (or other non-VOM) used to prepare the as-used cleaning solution;
    - E. The VOM content of the as-used cleaning solution with supporting calculations; and
    - F. A calibration log for the automatic equipment, detailing periodic checks;
  - ii. For each batch of cleaning solution which is not prepared at the source with automatic equipment:
    - A. The name and identification of each cleaning solution;
    - B. Date, time of preparation, and each subsequent modification of the batch;

- C. The VOM content of each cleaning solvent in the cleaning solution;
  - D. The total amount of each cleaning solvent and water (or other non-VOM) used to prepare the as-used cleaning solution; and
  - E. The VOM content of the as-used cleaning solution, with supporting calculations. For cleaning solutions that are not prepared at the site but are used as purchased, the manufacturer's specifications for VOM content may be used if such manufacturer's specifications are based on results of tests of the VOM content conducted in accordance with methods specified in 35 Ill. Adm. Code 218.105(a);
- b. Pursuant to 35 Ill. Adm. Code 218.187(e)(4), all sources complying with 35 Ill. Adm. Code 218.187 pursuant to the requirements of 35 Ill. Adm. Code 218.187(b)(2) shall collect and record the following information for each cleaning solution used:
- i. The name and identification of each cleaning solution;
  - ii. Date, time of preparation, and each subsequent modification of the batch;
  - iii. The molecular weight, density, and VOM composite partial vapor pressure of each cleaning solvent, as determined in accordance with the applicable methods and procedures specified in 35 Ill. Adm. Code 218.110;
  - iv. The total amount of each cleaning solvent used to prepare the as-used cleaning solution; and
  - v. The VOM composite partial vapor pressure of each as-used cleaning solution, as determined in accordance with the applicable methods and procedures specified in 35 Ill. Adm. Code 218.110;
- c. Pursuant to 35 Ill. Adm. Code 218.187(e)(10), all records required by 35 Ill. Adm. Code 218.187(e) shall be retained by the source for at least three years and shall be made available to the Illinois EPA upon request.
- d. Pursuant to 35 Ill. Adm. Code 218.404(c)(2), any owner or operator of a printing line subject to the limitations of 35 Ill. Adm. Code 218.401 and complying by means of 35 Ill. Adm. Code 218.401(a) shall comply with the following: On and after a date consistent with 35 Ill. Adm. Code 218.106, or 35 Ill. Adm. Code 218.403(e), as applicable, or on and after the initial start-up date, the owner or operator of a printing line subject to the limitations of 35 Ill. Adm. Code 218.401 and complying by means of 35 Ill. Adm. Code 218.401(a) shall collect and record all of the following information each day for each coating line and maintain the information at the source for a period of three years:



- i. The name and identification number of each coating and ink as applied on each printing line.
    - ii. The VOM content of each coating and ink as applied each day on each printing line.
  - e. Pursuant to 35 Ill. Adm. Code 218.904(b)(4), all sources subject to the requirements of 35 Ill. Adm. Code Part 218 Subpart JJ shall retain all records required by 35 Ill. Adm. Code 218.904 for at least three years and make those records available to the Illinois EPA upon request.
  - f. Pursuant to 35 Ill. Adm. Code 218.904(c)(2), the owner or operator of an adhesive application operation subject to the limitations of 35 Ill. Adm. Code 218.901 and complying by means of 35 Ill. Adm. Code 218.901(b) shall collect and record the name, identification number, and VOM content of each adhesive as applied each day by each adhesive application operation complying with 35 Ill. Adm. Code 218.901(b).
- 21a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:
- i. Usage of inks, coatings and solvents (gallons/month and gallons/year or lb/month and lb/year);
  - ii. VOM and HAP contents of the materials used (% by weight);
  - iii. Density of each inks, coatings and solvents used (lbs/gallon);
  - iv. Starch deliveries (tons/month, tons/year);
  - v. Combined natural gas usage for the boilers and space heaters (scf/month and scf/year);
  - vi. Liquid petroleum gas usage for the boiler (gallons/month and gallons/year); and
  - vii. Monthly and annual emissions of CO, NO<sub>x</sub>, PM, SO<sub>2</sub>, VOM, and HAPs from the source with supporting calculations (tons/month and tons/year).
- b. The Permittee shall maintain the following records to allow the confirmation of actual VOM emissions during the seasonal allotment period:
- i. Records of operating data and other information for each individual emission unit or group of related emission units at the source, as appropriate, to determine actual VOM emissions during the seasonal allotment period;
  - ii. Records of the VOM emissions, in tons, during the seasonal allotment period, with supporting calculations, for each individual emission unit or group of related emission units at the source, determined in accordance with the procedures that may be specified in this permit; and

- iii. Total VOM emissions from the source, in tons, during each seasonal allotment period, which shall be compiled by November 30 of each year.
  - c. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer storage device) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.
22. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.
- 23a. Pursuant to 35 Ill. Adm. Code 218.187(e)(2)(B), all sources subject to the requirements of 35 Ill. Adm. Code 218.187 shall: At least 30 calendar days before changing the method of compliance between 35 Ill. Adm. Code 218.187(b)(1), (b)(2), (b)(4), or (b)(5) and 35 Ill. Adm. Code 218.187(b)(3), notify the Illinois EPA in writing of such change. Such notification shall include a demonstration of compliance with the newly applicable subsection;
- b. Pursuant to 35 Ill. Adm. Code 218.187(e)(9), all sources subject to the requirements of 35 Ill. Adm. Code 218.187(b) and (d) shall notify the Illinois EPA of any violation of 35 Ill. Adm. Code 218.187(b) or (d) by providing a description of the violation and copies of records documenting the violation to the Illinois EPA within 30 days following the occurrence of the violation;
  - c. Pursuant to 35 Ill. Adm. Code 218.404(c)(3), any owner or operator of a printing line subject to the limitations of 35 Ill. Adm. Code 218.401 and complying by means of 35 Ill. Adm. Code 218.401(a) shall comply with the following: On and after a date consistent with 35 Ill. Adm. Code 218.106, or 35 Ill. Adm. Code 218.403(e), as applicable, the owner or operator of a subject printing line shall notify the Illinois EPA in the following instances:
    - i. Any record showing violation of 35 Ill. Adm. Code 218.401(a) shall be reported by sending a copy of such record to the Illinois EPA within 30 days following the occurrence of the violation.
    - ii. At least 30 calendar days before changing the method of compliance with 35 Ill. Adm. Code 218.401 from 35 Ill. Adm. Code 218.401(a) to 35 Ill. Adm. Code 218.401(b) or (c), the owner or operator shall comply with all requirements of 35 Ill. Adm. Code

218.404(d)(1) or (e)(1), respectively. Upon changing the method of compliance with 35 Ill. Adm. Code 218.401 from 35 Ill. Adm. Code 218.401(a) to 35 Ill. Adm. Code 218.401(b) or (c), the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.404(d) or (e), respectively.

d. Pursuant to 35 Ill. Adm. Code 218.904(b), all sources subject to the requirements of 35 Ill. Adm. Code 218 Subpart JJ shall:

- i. At least 30 calendar days before changing the method of compliance in accordance with 35 Ill. Adm. Code 218.901(b), (c), and (d), notify the Illinois EPA in writing of the change. The notification shall include a demonstration of compliance with the newly applicable subsection;
- ii. Notify the Illinois EPA in writing of any violation of the requirements of 35 Ill. Adm. Code 218 Subpart JJ within 30 days following the occurrence of the violation and provide records documenting the violation upon request by the Illinois EPA;

24a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance or deviation. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedances or deviation and efforts to reduce emissions and future occurrences.

b. Two (2) copies of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
Compliance Section (#40)  
P.O. Box 19276  
Springfield, Illinois 62794-9276

and one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
9511 West Harrison  
Des Plaines, Illinois 60016

It should be noted the following equipment at the facility does not require a permit:

- A stationary 130 HP Internal Combustion (diesel) engine driven emergency fire pump (exempt per 35 Ill. Adm. Code 201.146(i)).
- A stationary 130 HP Internal Combustion (natural gas) engine driven emergency generator (exempt per 35 Ill. Adm. Code 201.146(i)).

If you have any questions on this, please call David Hulskotter at 217/785-1705.

Raymond E. Pilapil  
Acting Manager, Permit Section  
Division of Air Pollution Control

Date Signed: \_\_\_\_\_

REP:DWH:jws

cc: Illinois EPA, FOS Region 1  
Lotus Notes

# Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the Corrugated Container Manufacturing Facility operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are below the levels, (e.g., 100 tons/year for VOM, 10 tons/year for any single HAP, and 25 tons per year for any combination of such HAPs) at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled, and control measures are more effective than required in this permit.

<u>Emission Unit</u>	E M I S S I O N S (Tons/Year)						
	<u>CO</u>	<u>NO<sub>x</sub></u>	<u>PM</u>	<u>SO<sub>2</sub></u>	<u>VOM</u>	<u>Single HAP</u>	<u>Total HAPs</u>
Printing & Gluing					78.00		
Space Heaters & Boilers Gas Combustion	12.3	14.6	1.1	0.01	0.8		
Boilers LPG Combustion	6.3	37.5	0.8	2.4	1.0		
Starch Silo			0.44				
Starch Adhesive					1.9		
Corrugating Process							
Pneumatic Scrap Paper Collection System	--	--	<u>0.44</u>	--	--	--	--
Totals	18.6	52.1	2.78	2.41	81.7	7.9	19.9